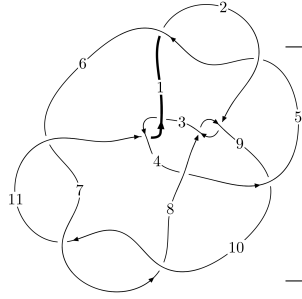
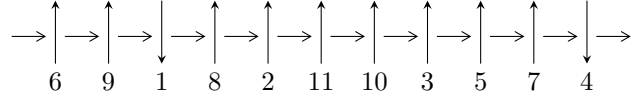


11a₂₉₆ (K11a₂₉₆)



A knot diagram¹

Linearized knot diagram



Solving Sequence

$$6, 11 \xrightarrow{c_6} 4, 7 \xrightarrow{c_{11}} 1 \xrightarrow{c_1} 2 \xrightarrow{c_3} 3 \xrightarrow{c_5} 5 \xrightarrow{c_{10}} 10 \xrightarrow{c_7} 8 \xrightarrow{c_9} 9 \rightsquigarrow c_2, c_4, c_8$$

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle -9.00774 \times 10^{87} u^{70} - 2.18808 \times 10^{87} u^{69} + \dots + 5.70348 \times 10^{89} b - 5.05378 \times 10^{89}, \\ - 5.09051 \times 10^{89} u^{70} + 1.23106 \times 10^{90} u^{69} + \dots + 5.70348 \times 10^{89} a - 1.93831 \times 10^{90}, u^{71} - 3u^{70} + \dots - 6u + 2 \rangle$$

$$I_2^u = \langle u^{14} + 2u^{13} + \dots + b + 2, \\ - u^{15} - 7u^{13} + 2u^{12} - 17u^{11} + 15u^{10} - 14u^9 + 41u^8 + 5u^7 + 50u^6 + 11u^5 + 25u^4 + u^3 + 4u^2 + a - 2u + 1, \\ u^{16} + 2u^{15} + \dots + 2u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 87 representations.

¹The image of knot diagram is generated by the software “**Draw programme**” developed by Andrew Bartholomew(<http://www.layer8.co.uk/maths/draw/index.htm#Running-draw>), where we modified some parts for our purpose(<https://github.com/CATsTAILs/LinksPainter>).

²All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

I.

$$I_1^u = \langle -9.01 \times 10^{87} u^{70} - 2.19 \times 10^{87} u^{69} + \dots + 5.70 \times 10^{89} b - 5.05 \times 10^{89}, -5.09 \times 10^{89} u^{70} + 1.23 \times 10^{90} u^{69} + \dots + 5.70 \times 10^{89} a - 1.94 \times 10^{90}, u^{71} - 3u^{70} + \dots - 6u + 1 \rangle$$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.892526u^{70} - 2.15844u^{69} + \dots - 10.7951u + 3.39847 \\ 0.0157934u^{70} + 0.00383640u^{69} + \dots - 7.17845u + 0.886087 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -2.67227u^{70} + 7.45363u^{69} + \dots - 50.3252u + 5.65629 \\ 0.673792u^{70} - 2.84206u^{69} + \dots + 8.69069u - 1.27093 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -1.99848u^{70} + 4.61158u^{69} + \dots - 41.6345u + 4.38536 \\ 0.673792u^{70} - 2.84206u^{69} + \dots + 8.69069u - 1.27093 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.937724u^{70} - 2.44311u^{69} + \dots + 25.2488u - 4.87921 \\ -0.334153u^{70} + 1.04108u^{69} + \dots - 5.67570u + 1.49367 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1.09394u^{70} - 2.86528u^{69} + \dots - 13.4038u + 3.36574 \\ 0.147468u^{70} - 0.313880u^{69} + \dots - 6.79147u + 0.840422 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -1.33394u^{70} + 4.17244u^{69} + \dots - 28.8076u + 3.70746 \\ -0.113697u^{70} + 0.700148u^{69} + \dots + 8.94630u - 0.936023 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -1.33394u^{70} + 4.17244u^{69} + \dots - 28.8076u + 3.70746 \\ -0.113697u^{70} + 0.700148u^{69} + \dots + 8.94630u - 0.936023 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $-0.389233u^{70} + 2.15935u^{69} + \dots - 15.8626u + 7.58410$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{71} - u^{70} + \dots - 1361u - 281$
c_2, c_8	$u^{71} + u^{70} + \dots + 117u - 76$
c_3, c_{11}	$u^{71} - 4u^{70} + \dots - 6u - 13$
c_4	$u^{71} - 5u^{70} + \dots - 8378u - 1711$
c_6, c_7, c_{10}	$u^{71} + 3u^{70} + \dots - 6u - 1$
c_9	$u^{71} + 18u^{69} + \dots - 57052u - 26357$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{71} + 59y^{70} + \dots - 1212265y - 78961$
c_2, c_8	$y^{71} + 49y^{70} + \dots - 79487y - 5776$
c_3, c_{11}	$y^{71} + 36y^{70} + \dots + 3572y - 169$
c_4	$y^{71} + 19y^{70} + \dots - 36750038y - 2927521$
c_6, c_7, c_{10}	$y^{71} + 73y^{70} + \dots - 40y - 1$
c_9	$y^{71} + 36y^{70} + \dots - 14918431652y - 694691449$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.876704 + 0.516917I$		
$a = 0.018044 + 1.313340I$	$-4.30422 + 11.39740I$	0
$b = 0.76980 - 1.61963I$		
$u = 0.876704 - 0.516917I$		
$a = 0.018044 - 1.313340I$	$-4.30422 - 11.39740I$	0
$b = 0.76980 + 1.61963I$		
$u = -0.383449 + 0.883215I$		
$a = 1.004320 - 0.563786I$	$1.53313 - 2.60659I$	0
$b = 0.979718 + 0.596029I$		
$u = -0.383449 - 0.883215I$		
$a = 1.004320 + 0.563786I$	$1.53313 + 2.60659I$	0
$b = 0.979718 - 0.596029I$		
$u = -0.952818 + 0.469187I$		
$a = -0.006177 - 1.082100I$	$0.03727 - 4.92803I$	0
$b = 0.81454 + 1.61178I$		
$u = -0.952818 - 0.469187I$		
$a = -0.006177 + 1.082100I$	$0.03727 + 4.92803I$	0
$b = 0.81454 - 1.61178I$		
$u = -0.276228 + 0.874801I$		
$a = 1.209770 + 0.164013I$	$-3.52903 - 0.05215I$	0
$b = -0.335540 + 0.242745I$		
$u = -0.276228 - 0.874801I$		
$a = 1.209770 - 0.164013I$	$-3.52903 + 0.05215I$	0
$b = -0.335540 - 0.242745I$		
$u = 0.850893 + 0.705002I$		
$a = -0.934029 - 0.345819I$	$-4.79765 - 5.63917I$	0
$b = 0.051753 + 1.245970I$		
$u = 0.850893 - 0.705002I$		
$a = -0.934029 + 0.345819I$	$-4.79765 + 5.63917I$	0
$b = 0.051753 - 1.245970I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.805118 + 0.297549I$ $a = -0.302889 + 0.998924I$ $b = 0.85415 - 1.55688I$	$-5.56347 - 1.22600I$	0
$u = 0.805118 - 0.297549I$ $a = -0.302889 - 0.998924I$ $b = 0.85415 + 1.55688I$	$-5.56347 + 1.22600I$	0
$u = 0.166244 + 1.177330I$ $a = 1.040880 + 0.200780I$ $b = 0.133932 - 0.567605I$	$-2.99865 + 0.00829I$	0
$u = 0.166244 - 1.177330I$ $a = 1.040880 - 0.200780I$ $b = 0.133932 + 0.567605I$	$-2.99865 - 0.00829I$	0
$u = 0.555602 + 0.566754I$ $a = -1.208260 + 0.562334I$ $b = 0.064611 + 0.675670I$	$-6.67179 + 5.48975I$	$1.10039 - 5.62534I$
$u = 0.555602 - 0.566754I$ $a = -1.208260 - 0.562334I$ $b = 0.064611 - 0.675670I$	$-6.67179 - 5.48975I$	$1.10039 + 5.62534I$
$u = -0.708755 + 0.346572I$ $a = -0.357040 + 1.214250I$ $b = 0.113056 - 1.348490I$	$3.03135 - 1.49469I$	$12.21917 + 1.87835I$
$u = -0.708755 - 0.346572I$ $a = -0.357040 - 1.214250I$ $b = 0.113056 + 1.348490I$	$3.03135 + 1.49469I$	$12.21917 - 1.87835I$
$u = -0.742406 + 0.959669I$ $a = -0.626210 + 0.097246I$ $b = -0.305996 - 1.152800I$	$-1.34036 - 1.05400I$	0
$u = -0.742406 - 0.959669I$ $a = -0.626210 - 0.097246I$ $b = -0.305996 + 1.152800I$	$-1.34036 + 1.05400I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.190903 + 0.733880I$ $a = 0.025776 - 0.589218I$ $b = -0.365991 - 0.359203I$	$-1.89003 - 1.47574I$	$1.69844 + 5.10987I$
$u = -0.190903 - 0.733880I$ $a = 0.025776 + 0.589218I$ $b = -0.365991 + 0.359203I$	$-1.89003 + 1.47574I$	$1.69844 - 5.10987I$
$u = 0.569734 + 0.484141I$ $a = -0.61345 - 1.53356I$ $b = -0.04604 + 1.49792I$	$0.82584 + 5.58849I$	$6.71893 - 8.23388I$
$u = 0.569734 - 0.484141I$ $a = -0.61345 + 1.53356I$ $b = -0.04604 - 1.49792I$	$0.82584 - 5.58849I$	$6.71893 + 8.23388I$
$u = -0.653667 + 0.146302I$ $a = 0.87774 + 1.79876I$ $b = -0.379281 - 1.055800I$	$-1.15932 - 3.38797I$	$5.90325 + 4.76662I$
$u = -0.653667 - 0.146302I$ $a = 0.87774 - 1.79876I$ $b = -0.379281 + 1.055800I$	$-1.15932 + 3.38797I$	$5.90325 - 4.76662I$
$u = 0.000769 + 1.346270I$ $a = 0.592643 + 0.337447I$ $b = 0.339498 - 1.090940I$	$-3.15202 - 1.08459I$	0
$u = 0.000769 - 1.346270I$ $a = 0.592643 - 0.337447I$ $b = 0.339498 + 1.090940I$	$-3.15202 + 1.08459I$	0
$u = -0.212829 + 1.337500I$ $a = -0.545515 + 0.939906I$ $b = -0.73928 - 1.47728I$	$-5.79082 - 6.48362I$	0
$u = -0.212829 - 1.337500I$ $a = -0.545515 - 0.939906I$ $b = -0.73928 + 1.47728I$	$-5.79082 + 6.48362I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.096488 + 1.359540I$ $a = 0.246854 - 0.294342I$ $b = -0.34390 + 1.89289I$	$-8.06307 + 3.83737I$	0
$u = 0.096488 - 1.359540I$ $a = 0.246854 + 0.294342I$ $b = -0.34390 - 1.89289I$	$-8.06307 - 3.83737I$	0
$u = 0.177258 + 1.357570I$ $a = -0.009719 - 0.403632I$ $b = -0.83501 + 1.55183I$	$-8.10631 + 3.87908I$	0
$u = 0.177258 - 1.357570I$ $a = -0.009719 + 0.403632I$ $b = -0.83501 - 1.55183I$	$-8.10631 - 3.87908I$	0
$u = 0.123250 + 1.376920I$ $a = -0.810111 - 0.684516I$ $b = -0.97380 + 1.34302I$	$-4.05458 + 4.15368I$	0
$u = 0.123250 - 1.376920I$ $a = -0.810111 + 0.684516I$ $b = -0.97380 - 1.34302I$	$-4.05458 - 4.15368I$	0
$u = 0.018897 + 1.385550I$ $a = -1.241690 - 0.236182I$ $b = -1.362110 + 0.377613I$	$-3.28165 + 2.64244I$	0
$u = 0.018897 - 1.385550I$ $a = -1.241690 + 0.236182I$ $b = -1.362110 - 0.377613I$	$-3.28165 - 2.64244I$	0
$u = 0.481402 + 0.355980I$ $a = 0.994444 - 0.755690I$ $b = -0.273431 + 0.381017I$	$-2.67458 + 1.55489I$	$2.82989 - 4.24710I$
$u = 0.481402 - 0.355980I$ $a = 0.994444 + 0.755690I$ $b = -0.273431 - 0.381017I$	$-2.67458 - 1.55489I$	$2.82989 + 4.24710I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.06503 + 1.42398I$		
$a = 0.662560 - 0.647023I$	$-4.60407 - 3.10250I$	0
$b = 0.148769 + 0.759204I$		
$u = -0.06503 - 1.42398I$		
$a = 0.662560 + 0.647023I$	$-4.60407 + 3.10250I$	0
$b = 0.148769 - 0.759204I$		
$u = -0.05232 + 1.45453I$		
$a = -0.735490 + 0.335267I$	$-10.25020 - 4.13818I$	0
$b = -2.09725 - 1.71117I$		
$u = -0.05232 - 1.45453I$		
$a = -0.735490 - 0.335267I$	$-10.25020 + 4.13818I$	0
$b = -2.09725 + 1.71117I$		
$u = -0.25007 + 1.45878I$		
$a = -0.547129 + 0.418576I$	$-2.82172 - 4.95017I$	0
$b = -0.61317 - 1.54749I$		
$u = -0.25007 - 1.45878I$		
$a = -0.547129 - 0.418576I$	$-2.82172 + 4.95017I$	0
$b = -0.61317 + 1.54749I$		
$u = 0.34183 + 1.48836I$		
$a = 0.599521 + 0.532622I$	$-11.32690 + 3.07672I$	0
$b = 1.82790 - 1.33312I$		
$u = 0.34183 - 1.48836I$		
$a = 0.599521 - 0.532622I$	$-11.32690 - 3.07672I$	0
$b = 1.82790 + 1.33312I$		
$u = 0.19479 + 1.51543I$		
$a = -0.459769 + 0.827837I$	$-13.4581 + 8.2834I$	0
$b = 0.114814 - 0.131344I$		
$u = 0.19479 - 1.51543I$		
$a = -0.459769 - 0.827837I$	$-13.4581 - 8.2834I$	0
$b = 0.114814 + 0.131344I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.19607 + 1.51746I$ $a = -0.670319 - 0.456053I$ $b = -0.52830 + 1.86550I$	$-5.78366 + 8.41270I$	0
$u = 0.19607 - 1.51746I$ $a = -0.670319 + 0.456053I$ $b = -0.52830 - 1.86550I$	$-5.78366 - 8.41270I$	0
$u = -0.14626 + 1.54836I$ $a = -0.223801 - 0.693017I$ $b = -0.069496 + 0.154353I$	$-9.50943 - 3.27093I$	0
$u = -0.14626 - 1.54836I$ $a = -0.223801 + 0.693017I$ $b = -0.069496 - 0.154353I$	$-9.50943 + 3.27093I$	0
$u = 0.420094 + 0.080132I$ $a = 0.54577 - 2.67604I$ $b = -0.403742 + 1.076110I$	$0.66143 + 2.25848I$	$4.43494 + 0.57709I$
$u = 0.420094 - 0.080132I$ $a = 0.54577 + 2.67604I$ $b = -0.403742 - 1.076110I$	$0.66143 - 2.25848I$	$4.43494 - 0.57709I$
$u = 0.31389 + 1.54199I$ $a = 0.690616 + 0.664349I$ $b = 1.38403 - 1.60738I$	$-10.9839 + 15.7452I$	0
$u = 0.31389 - 1.54199I$ $a = 0.690616 - 0.664349I$ $b = 1.38403 + 1.60738I$	$-10.9839 - 15.7452I$	0
$u = -0.32953 + 1.53939I$ $a = 0.683207 - 0.587683I$ $b = 1.50202 + 1.41422I$	$-6.50526 - 9.54418I$	0
$u = -0.32953 - 1.53939I$ $a = 0.683207 + 0.587683I$ $b = 1.50202 - 1.41422I$	$-6.50526 + 9.54418I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.350278 + 0.238783I$ $a = 2.06396 + 2.08046I$ $b = -0.108087 - 0.747622I$	$0.99996 - 2.28586I$	$9.25040 + 1.43697I$
$u = 0.350278 - 0.238783I$ $a = 2.06396 - 2.08046I$ $b = -0.108087 + 0.747622I$	$0.99996 + 2.28586I$	$9.25040 - 1.43697I$
$u = -0.380862$ $a = 0.547449$ $b = 0.250181$	0.684340	14.6690
$u = -0.00681 + 1.62560I$ $a = 0.370034 + 0.196828I$ $b = -0.791967 - 0.211199I$	$-12.04640 - 0.66622I$	0
$u = -0.00681 - 1.62560I$ $a = 0.370034 - 0.196828I$ $b = -0.791967 + 0.211199I$	$-12.04640 + 0.66622I$	0
$u = 0.18915 + 1.65621I$ $a = -0.370196 + 0.320048I$ $b = -0.241587 + 0.177123I$	$-12.95250 - 1.69138I$	0
$u = 0.18915 - 1.65621I$ $a = -0.370196 - 0.320048I$ $b = -0.241587 - 0.177123I$	$-12.95250 + 1.69138I$	0
$u = 0.033849 + 0.258899I$ $a = 4.95781 - 0.70188I$ $b = -0.156325 - 0.185251I$	$1.05941 - 2.33356I$	$9.20153 - 2.18443I$
$u = 0.033849 - 0.258899I$ $a = 4.95781 + 0.70188I$ $b = -0.156325 + 0.185251I$	$1.05941 + 2.33356I$	$9.20153 + 2.18443I$
$u = -0.100795 + 0.225172I$ $a = -2.19587 + 2.54396I$ $b = -1.25338 - 1.68214I$	$-4.54187 - 3.47725I$	$1.03919 + 11.73810I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.100795 - 0.225172I$		
$a = -2.19587 - 2.54396I$	$-4.54187 + 3.47725I$	$1.03919 - 11.73810I$
$b = -1.25338 + 1.68214I$		

II.

$$I_2^u = \langle u^{14} + 2u^{13} + \dots + b + 2, -u^{15} - 7u^{13} + \dots + a + 1, u^{16} + 2u^{15} + \dots + 2u + 1 \rangle$$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u^{15} + 7u^{13} + \dots + 2u - 1 \\ -u^{14} - 2u^{13} + \dots - 4u - 2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u^{14} - 3u^{13} + \dots - 3u - 4 \\ -u^{15} - 2u^{14} + \dots + 2u^2 - u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -u^{15} - 3u^{14} + \dots - 4u - 4 \\ -u^{15} - 2u^{14} + \dots + 2u^2 - u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^{15} - u^{14} + \dots - u - 2 \\ -u^{14} - 2u^{13} + \dots - 4u - 1 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} u^{15} + 7u^{13} + \dots - 6u^2 - 1 \\ -u^5 - u^4 - 3u^3 - 2u^2 - 2u - 1 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -2u^{15} - 4u^{14} + \dots - u - 1 \\ -u^{13} - 2u^{12} + \dots - 9u^3 - 2u^2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -2u^{15} - 4u^{14} + \dots - u - 1 \\ -u^{13} - 2u^{12} + \dots - 9u^3 - 2u^2 \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = $8u^{15} + 11u^{14} + 75u^{13} + 88u^{12} + 284u^{11} + 269u^{10} + 546u^9 + 386u^8 + 544u^7 + 244u^6 + 249u^5 + 41u^4 + 44u^3 - 2u^2 + 14u + 7$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{16} + 8u^{14} + \dots + 3u + 1$
c_2	$u^{16} + 5u^{14} + \dots + 4u^2 + 1$
c_3	$u^{16} + 3u^{15} + \dots + 8u^2 + 1$
c_4	$u^{16} + u^{13} + \dots - 7u^2 + 1$
c_5	$u^{16} + 8u^{14} + \dots - 3u + 1$
c_6, c_7	$u^{16} + 2u^{15} + \dots + 2u + 1$
c_8	$u^{16} + 5u^{14} + \dots + 4u^2 + 1$
c_9	$u^{16} + u^{15} + \dots + 6u^2 + 1$
c_{10}	$u^{16} - 2u^{15} + \dots - 2u + 1$
c_{11}	$u^{16} - 3u^{15} + \dots + 8u^2 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{16} + 16y^{15} + \cdots + 13y + 1$
c_2, c_8	$y^{16} + 10y^{15} + \cdots + 8y + 1$
c_3, c_{11}	$y^{16} + 13y^{15} + \cdots + 16y + 1$
c_4	$y^{16} - 2y^{14} + \cdots - 14y + 1$
c_6, c_7, c_{10}	$y^{16} + 18y^{15} + \cdots + 4y + 1$
c_9	$y^{16} + 5y^{15} + \cdots + 12y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.569342 + 1.028560I$		
$a = 0.720411 - 0.176385I$	$-0.549860 - 0.999226I$	$9.35133 + 0.51407I$
$b = 0.175330 + 0.986553I$		
$u = -0.569342 - 1.028560I$		
$a = 0.720411 + 0.176385I$	$-0.549860 + 0.999226I$	$9.35133 - 0.51407I$
$b = 0.175330 - 0.986553I$		
$u = -0.324061 + 0.738568I$		
$a = -1.22712 + 0.86928I$	$0.66827 - 2.96805I$	$2.18241 + 5.99537I$
$b = -1.167210 - 0.652672I$		
$u = -0.324061 - 0.738568I$		
$a = -1.22712 - 0.86928I$	$0.66827 + 2.96805I$	$2.18241 - 5.99537I$
$b = -1.167210 + 0.652672I$		
$u = -0.051468 + 1.266120I$		
$a = 1.278820 + 0.261068I$	$-2.01678 + 1.79591I$	$6.94894 - 2.52988I$
$b = 0.427098 + 0.016868I$		
$u = -0.051468 - 1.266120I$		
$a = 1.278820 - 0.261068I$	$-2.01678 - 1.79591I$	$6.94894 + 2.52988I$
$b = 0.427098 - 0.016868I$		
$u = 0.168287 + 1.312890I$		
$a = -0.500784 - 0.449767I$	$-7.83940 + 4.87519I$	$1.58436 - 7.54746I$
$b = -1.55170 + 2.17075I$		
$u = 0.168287 - 1.312890I$		
$a = -0.500784 + 0.449767I$	$-7.83940 - 4.87519I$	$1.58436 + 7.54746I$
$b = -1.55170 - 2.17075I$		
$u = -0.18168 + 1.42029I$		
$a = -0.619856 + 0.736296I$	$-4.56313 - 5.40512I$	$2.67129 + 5.45372I$
$b = -0.71287 - 1.31954I$		
$u = -0.18168 - 1.42029I$		
$a = -0.619856 - 0.736296I$	$-4.56313 + 5.40512I$	$2.67129 - 5.45372I$
$b = -0.71287 + 1.31954I$		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.458536 + 0.295995I$ $a = -0.30047 + 2.31517I$ $b = -0.443631 - 0.902773I$	$0.92810 - 3.00419I$	$8.30090 + 9.42735I$
$u = -0.458536 - 0.295995I$ $a = -0.30047 - 2.31517I$ $b = -0.443631 + 0.902773I$	$0.92810 + 3.00419I$	$8.30090 - 9.42735I$
$u = 0.349990 + 0.344981I$ $a = 1.33662 + 0.55629I$ $b = -0.74370 - 1.67764I$	$-4.41668 - 2.95405I$	$4.95739 - 2.07123I$
$u = 0.349990 - 0.344981I$ $a = 1.33662 - 0.55629I$ $b = -0.74370 + 1.67764I$	$-4.41668 + 2.95405I$	$4.95739 + 2.07123I$
$u = 0.06681 + 1.63596I$ $a = 0.312384 - 0.028797I$ $b = -0.483326 - 0.701860I$	$-11.81930 - 1.32705I$	$4.00338 + 5.75939I$
$u = 0.06681 - 1.63596I$ $a = 0.312384 + 0.028797I$ $b = -0.483326 + 0.701860I$	$-11.81930 + 1.32705I$	$4.00338 - 5.75939I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{16} + 8u^{14} + \dots + 3u + 1)(u^{71} - u^{70} + \dots - 1361u - 281)$
c_2	$(u^{16} + 5u^{14} + \dots + 4u^2 + 1)(u^{71} + u^{70} + \dots + 117u - 76)$
c_3	$(u^{16} + 3u^{15} + \dots + 8u^2 + 1)(u^{71} - 4u^{70} + \dots - 6u - 13)$
c_4	$(u^{16} + u^{13} + \dots - 7u^2 + 1)(u^{71} - 5u^{70} + \dots - 8378u - 1711)$
c_5	$(u^{16} + 8u^{14} + \dots - 3u + 1)(u^{71} - u^{70} + \dots - 1361u - 281)$
c_6, c_7	$(u^{16} + 2u^{15} + \dots + 2u + 1)(u^{71} + 3u^{70} + \dots - 6u - 1)$
c_8	$(u^{16} + 5u^{14} + \dots + 4u^2 + 1)(u^{71} + u^{70} + \dots + 117u - 76)$
c_9	$(u^{16} + u^{15} + \dots + 6u^2 + 1)(u^{71} + 18u^{69} + \dots - 57052u - 26357)$
c_{10}	$(u^{16} - 2u^{15} + \dots - 2u + 1)(u^{71} + 3u^{70} + \dots - 6u - 1)$
c_{11}	$(u^{16} - 3u^{15} + \dots + 8u^2 + 1)(u^{71} - 4u^{70} + \dots - 6u - 13)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{16} + 16y^{15} + \dots + 13y + 1)(y^{71} + 59y^{70} + \dots - 1212265y - 78961)$
c_2, c_8	$(y^{16} + 10y^{15} + \dots + 8y + 1)(y^{71} + 49y^{70} + \dots - 79487y - 5776)$
c_3, c_{11}	$(y^{16} + 13y^{15} + \dots + 16y + 1)(y^{71} + 36y^{70} + \dots + 3572y - 169)$
c_4	$(y^{16} - 2y^{14} + \dots - 14y + 1)$ $\cdot (y^{71} + 19y^{70} + \dots - 36750038y - 2927521)$
c_6, c_7, c_{10}	$(y^{16} + 18y^{15} + \dots + 4y + 1)(y^{71} + 73y^{70} + \dots - 40y - 1)$
c_9	$(y^{16} + 5y^{15} + \dots + 12y + 1)$ $\cdot (y^{71} + 36y^{70} + \dots - 14918431652y - 694691449)$